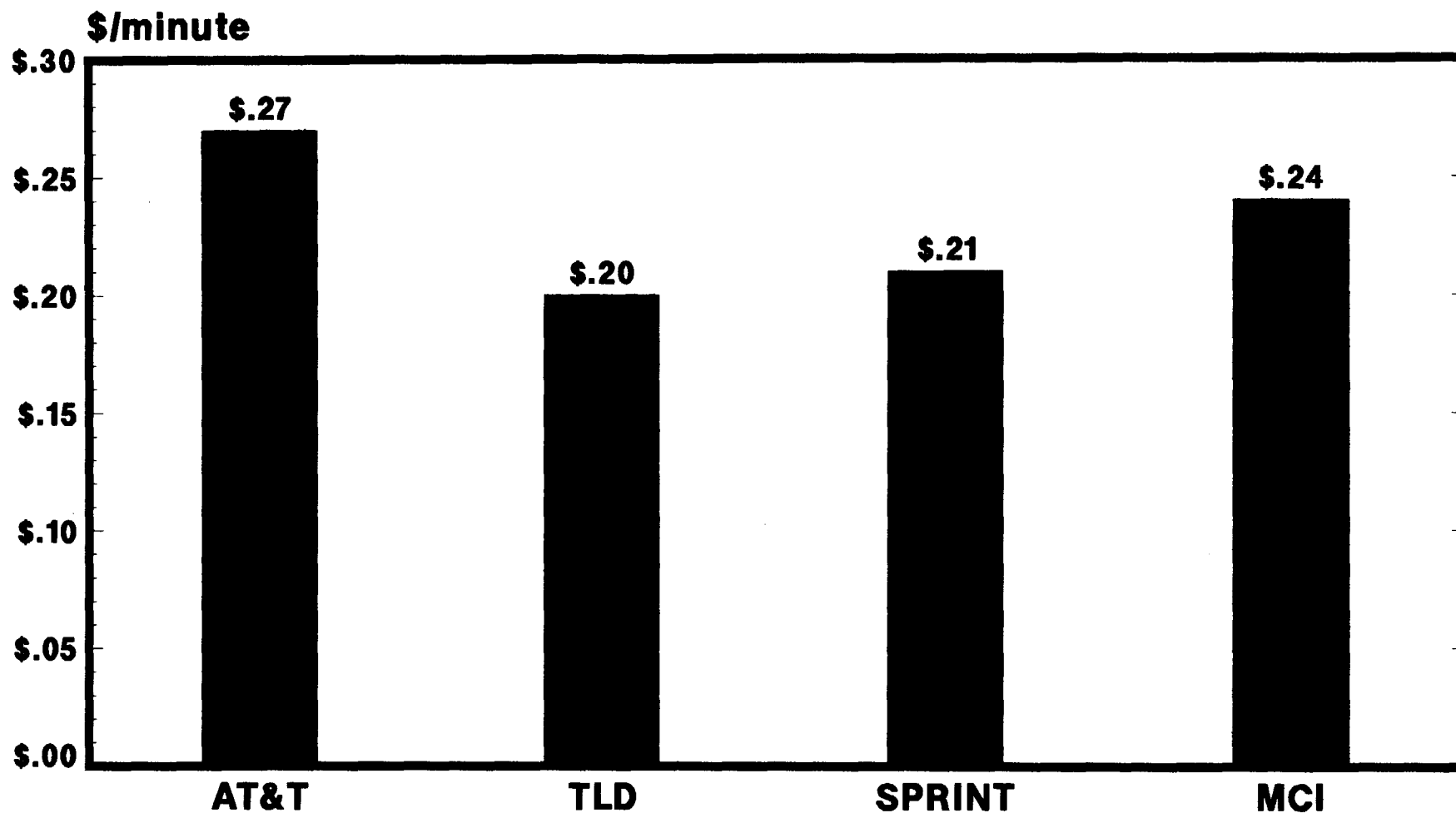


FIGURE 3
CURRENT PUERTO RICO DOMESTIC TARIFFS
BAND I DAYTIME



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is \$0.20, while AT&T's rate is \$0.27.^{18/} MCI's rate is \$0.239 and Sprint's rate is \$0.21. By comparison, the average intra-mainland daytime rate charged by AT&T currently is \$0.264.^{19/} Thus the TLD daytime rate for calls from Puerto Rico to the mainland, \$0.20, is 24% less than the average AT&T rate for long distance calls within the mainland.

Figure 4 focuses on how tariff rates have changed since equal access. We see how TLD, as well as offering the lowest prices today, has been the lowest priced carrier for Band 1 daytime, the primary category of service for business users, for the majority of the time since equal access.

We also see from **Figure 4** that the competitive environment is changing. TLD and Sprint have reduced their prices substantially in 1992 and 1993, while AT&T has significantly increased its price. AT&T imposed a rate increase in October of 1993, and then in January of 1994 imposed an even greater price increase. On Band 1 daytime calls, AT&T increased its prices 4.2 percent in October, 1993 then by another 8 percent in January, 1994! Also in January, 1994, AT&T increased its Band 1 evening rate by 13.3 percent, and its Band 1 night rate by 7.7 percent. As revealed in **Figure 5** below, the predominant recent rate changes have been substantial rate increases by AT&T, and substantial price reductions by TLD.

^{18/} TLD's Band 2 and Band 3 rates also are \$0.20. AT&T's Band 2 rate is \$0.27, while its Band 3 rate is \$0.30.

^{19/} Based on AT&T's April 29, 1994 tariff filing.

FIGURE 4
PUERTO RICO DOMESTIC TARIFFS 1989-1994
BAND I DAYTIME

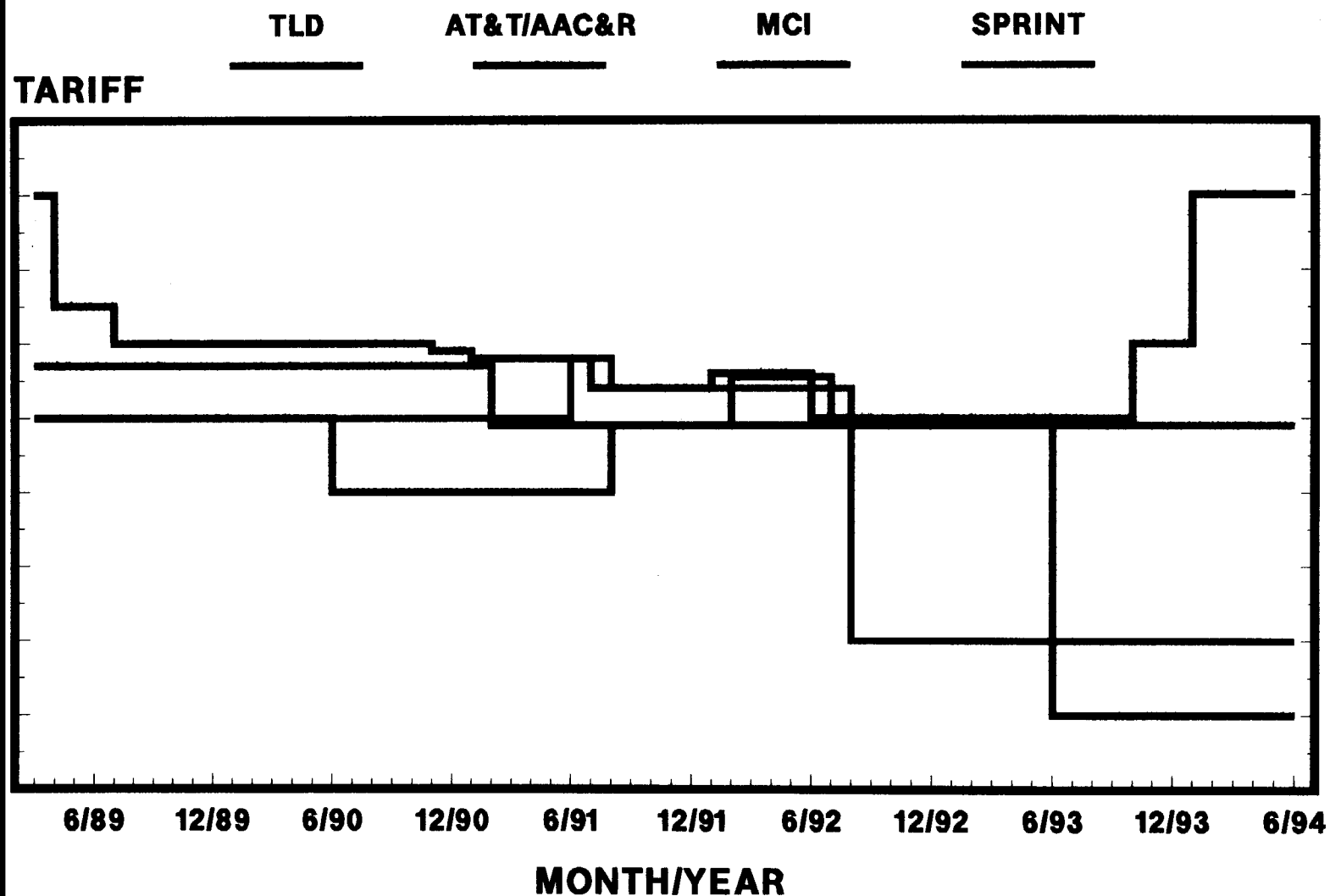
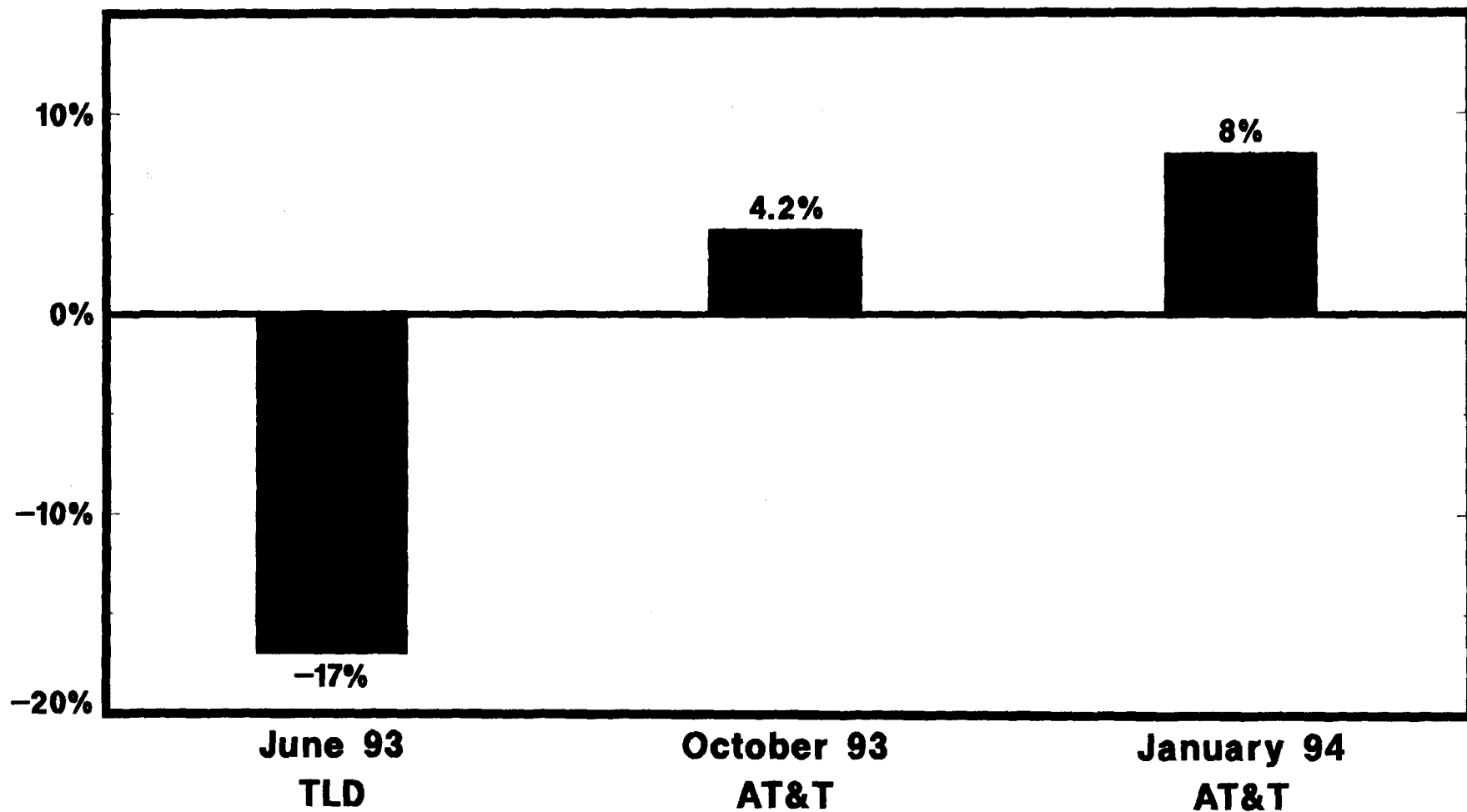


FIGURE 5
AT&T AND TLD 1993-1994 TARIFF CHANGES
FOR BAND I DAYTIME



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The question naturally arises, why would AT&T raise prices shortly after substantial price cuts by its major rivals? The apparent paradox has a simple answer. AT&T appears to be raising its base rates while providing highly selective discounts to certain valuable high-volume Puerto Rican customers (that are generally multi-national corporations rather than local businesses). AT&T's new strategy is costly to its non-favored customers. The success that AT&T can achieve with this strategy is not yet clear. But what is clear is that a strong TLD will provide a low-cost option to those customers disadvantaged by AT&T's strategy, and a weakened TLD would enable AT&T to continue or even to accelerate its price increase policies, to the detriment of Puerto Rican customers.

B. International Price Competition

As with domestic traffic, TLD and AT&T compete head-to-head for international calls. Based on traffic reports filed with the FCC, market shares as measured in minutes for some of the routes receiving the most traffic from Puerto Rico are presented in **Table 3.**^{20/} It is clear from these figures that AT&T and TLD are the predominant competitors on all of these routes. It also is interesting to note that TLD has made particularly strong inroads into certain markets such as service to Canada. The erosion of AT&T's traffic and profits on routes such as Puerto Rico - Canada

^{20/} Based on each carrier's 1992 traffic reports.

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is indicative of the further inroads that TLD is capable of making against AT&T across the board if it is allowed to compete on a level playing field.

TABLE 3

MARKET SHARES FOR MAJOR INTERNATIONAL ROUTES

	<u>AT&T</u>	<u>TLD</u>	<u>MCI</u>	<u>Sprint</u>
Dominican Republic	54.7%	25.9%	5%	7%
Colombia	60%	26.7%	7.2%	6.1%
Canada	40.5%	45%	10.4%	5.5%
Mexico	64.1%	21.5%	10%	4.4%

Competition for international traffic has resulted in dramatic savings for Puerto Rican customers. **Table 4** illustrates how rates have fallen on major international routes since equal access, and also how TLD's rates today are lower than AT&T's. AT&T's daytime rate prior to equal access for calls to the Dominican Republic (the

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largest sub-market for international calls originating Puerto Rico) was \$1.25 for the first minute and \$0.75 for each additional minute. TLD customers now can call the Dominican Republic during weekdays for only \$0.63 per minute. This is a savings of 50 percent for the first minute and 16 percent for each additional minute.

But note that it is not just TLD's customers that obtain the savings due to TLD's competition with AT&T. As Table 4 clearly illustrates, AT&T's customers also benefit as competition from TLD forces down AT&T's rates.

C. Discount Plans

A careful analysis of tariffs in long distance markets requires that attention be paid not just to posted base tariff rate schedules but also to transaction prices that incorporate discount packages offered by the various competitors. Each competitor offers discount plans. TLD offers the STAR discount plan and the Universal discount plan, while MCI offers a plan called Friends & Family, and Sprint offers two plans called The Most and MVP. It is difficult to make generalized comments about AT&T's discount plans, because they are much less standardized than the plans of its competitors. AT&T customizes plans to individual customers, which provides an extreme version of "cream skimming."

The critical attribute of any discount plan is simply what total savings it provides to customers. Comparing the complex

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TABLE 4

**RATES FOR BAND 1 DAYTIME CALLS FROM PUERTO RICO
TO MAJOR INTERNATIONAL DESTINATIONS**

	<u>1st min.</u>	<u>add. min.</u>
Dominican Republic		
AT&T 1989	\$1.25	\$0.75
AT&T 1994	\$0.86	\$0.66
TLD 1994	\$0.63	\$0.63
Colombia		
AT&T 1989	\$2.30	\$1.89
AT&T 1994	\$1.71	\$1.56
TLD 1994	\$1.55	\$1.55
Canada		
AT&T 1989	\$2.00	\$2.00
AT&T 1994	\$1.39	\$1.19
TLD 1994	\$1.18	\$1.18
Mexico		
AT&T 1989	\$2.45	\$2.25
AT&T 1994	\$1.85	\$1.65
TLD 1994	\$1.60	\$1.60

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details of several plans cannot provide a simple determination of what savings ultimately will result from each plan. But the ultimate effect of discount plans is shown on the bills that are received by customers. By dividing firms' total billed revenues by the total number of minutes of traffic, the actual average amount charged can be determined. **Table 5** shows the results of this calculation for calls to the Dominican Republic, the most popular international destination. We see from the table that once all discounts are considered, TLD is still the lowest priced carrier, with average billed revenue per minute 20% lower than AT&T.^{21/}

TABLE 5

**1992 ACTUAL AVERAGE PER MINUTE CHARGE FOR CALLS
FROM PUERTO RICO TO DOMINICAN REPUBLIC**

AT&T	\$0.79
TLD	\$0.62
MCI	\$0.70
Sprint	\$0.63

^{21/} Sources: The most recent available 43.61 report for each carrier (1992).

IV. IMPLICATIONS OF TELECOMMUNICATIONS COMPETITION FOR PUERTO RICAN ECONOMIC DEVELOPMENT

By historical standards, Puerto Rico has experienced substantial economic growth that affected practically every sector of its economy beginning in the last part of the 1980s. For the period 1988 to 1993, the Island's GNP grew by 35 percent in nominal terms or by about 12 percent in real terms. Employment growth was part of this expansion, increasing 10 percent over this period.^{22/} Most of this growth, however, occurred in the first two and one half years of this period. Not surprisingly, the fortunes of the Puerto Rican economy are linked to economic activity on the mainland and the recession that began on the mainland in late 1990 was felt in Puerto Rico by the middle of 1991. Growth slowed to 0.8 percent in 1991. Unemployment rose from a low of 14.3 percent in 1990 to 16.8 percent by 1993. Puerto Rican growth is now beginning to recover along with the U.S. The Puerto Rico government projects a 3 percent increase in the GNP.^{23/}

Although significant portions of Puerto Rican manufactured products are exported to the U.S., Puerto Rican businesses compete in a broad range of international markets, from textiles and tourism to pharmaceuticals and electronics. These international

^{22/} Puerto Rico, U.S.A., Business and Economic Facts, December 1993, Government of Puerto Rico, Economic Development Administration Office of Economic Research, p.9.

^{23/} Ibid., p. 10.

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markets are generally fiercely competitive, and Puerto Rican businesses need every advantage in order to compete effectively.

The U.S. government has played a major role in encouraging business development in Puerto Rico by providing tax advantages to businesses that operate there.^{24/} With unemployment now at almost 3 times U.S. levels, and per capita income at \$6,626 (which is only 36.7% of the U.S. per capita income),^{25/} the Puerto Rican economy is in need of as much economic stimulus as it can get.

The most cost-effective way for the federal government to support the Puerto Rican economy is to allow the free market to generate economic opportunities. Promoting competition and efficiency in Puerto Rico through the regulatory process, where appropriate, generates direct benefits in the form of lower prices and better service quality for Puerto Rican customers. It also increases the efficiency of Puerto Rican businesses, thereby helping them compete with foreign competitors and stimulate Puerto Rico's economy.

Access to advanced telecommunications services at competitive prices can be a critical element of a company's ability to compete in international markets. High-quality telecommunications services competitively priced are, of course, beneficial to any business, but are particularly beneficial to certain industries. Service

^{24/} Gary Martin, "Industrial Policy By Accident: The United States in Puerto Rico," Journal of Hispanic Policy, 1989.

^{25/} Puerto Rico, U.S.A., Business and Economic Facts, pp. 2, 9 and 10.

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industries, for example, rely heavily on telecommunications, as do the retail and financial sectors. Recent research has demonstrated very high gains in productivity in these industries in response to advancements in telecommunications resulting from intense competition.^{26/} Puerto Rican economic development is dependent on these very industries.^{27/} The continued growth of these industries and their contribution to employment and economic stability of Puerto Rico would benefit substantially from continued improvements in telecommunications services including competition between TLD and AT&T.

When the Commission approved the privatization of TLD, it determined that a privatized TLD would "encourage competition, lower rates, and bring better service to the public."^{28/} TLD has done just that but its continued ability to serve this important role requires that it not be prevented from expanding with the market when technology promises to deliver production and services more efficiently.

We have seen that TLD customer profiles (Figures 2 and 3) include business originated traffic (30 percent) with significant numbers in the small size range that are locally based in Puerto

^{26/} The Contribution of Telecommunications Infrastructure to Aggregate and Sectoral Efficiency, DRI Report, February, 1991.

^{27/} Puerto Rico, USA: Business and Economic Facts; and Caribbean Business to Business Guide '93, (Casiano Publications Inc. Puerto Rico 1993) p. 162.

^{28/} Telefónica Larga Distancia, 8 FCC Rcd., 106, 116 (1992).

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Rico (60 percent). These firms have the most to gain from improvements in telecommunications services including price, service, and technology competition between long distance carriers. Indeed studies show that technology advances in telecommunications permit significant savings to businesses in wholesale and retail trades, in services, construction and in finance, insurance and real estate.^{29/} In real estate, these savings reach an estimated high of \$5.36 for every additional \$1 spent on telecommunications services. More conservatively, savings average about \$1.65 for every additional \$1 spent in telecommunications.^{30/}

Thus, the more telecommunications services that can be delivered to the market, the greater the savings that are likely to materialize. This proposition is, of course, of greater relevance to markets, like Puerto Rico, where universal service has not been achieved and opportunities for growth are still to be exploited.

More importantly, telecommunications inspired efficiencies that are expressed in lower tariffs to customers and greater productivity will also translate to employment expansion. Indeed, some of the employment expansion that has been experienced in Puerto Rico since 1988 (90,000 jobs) is a result of greater productivity enhancing telecommunications services at lower tariffs.

^{29/} The Contribution of Telecommunications Infrastructure to Aggregate and Sectoral Efficiency, February 1991, DRI/McGraw-Hill, Table 4.6, p. 33.

^{30/} Ibid.

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Of course, it would be very difficult to identify the contribution telecommunications deregulation and the subsequent introduction of competition have made to this increase in jobs, relative to the contribution of other factors, and we do not attempt this here. Nevertheless, it is instructive to examine the dynamic that carries a significant price reduction in telecommunications services to an increase in Puerto Rico's gross domestic product and on to an expansion in employment.

A price reduction that is sacrificed when competition in telecommunications is constrained is likely to have a cost in employment growth. Tariff reductions in Puerto Rico for off-island traffic of the magnitude we have witnessed around the time of equal access were relatively large. For example long distance Band 1 day prices dropped from about 41 cents per minute in 1986, before equal access, to about 25 cents in 1990, a drop of 39 percent. Similar significant price changes were not seen again until TLD reduced its Band 1 day tariff between 1992 and 1993 from 24 cents to 20 cents, a fall of about 17 percent. If we consider a hypothetical example in which the other long distance carriers followed suit, and dropped their prices also, we may simulate the effect on Puerto Rican employment from this real world example.

We would expect that a fall in market price of 17 percent to stimulate the demand for off-island telecommunications services. This increase may be estimated with the help of the price elasticity of demand for off-island service and the value added to

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the Puerto Rican economy from the sale of a minute of long distance service. Depending on the period chosen we estimate the price elasticity of demand to range from $-.9$ to -1.47 .^{31/}

Using total minutes of originating off-island calls for Puerto Rico in 1992 (586 million minutes)^{32/} we may estimate their value added to the Puerto Rican economy. The value added of these minutes to the Puerto Rican Economy is the product of the estimated value added per minute of long distance service and total minutes. We estimate the average value added per minute to be 12.4 cents,^{33/} and the aggregate value added component of sales of telecommunications services to Puerto Rican GDP is approximately \$73 million.

A price elasticity of demand of $-.9$ will produce an increase in value added of 19 percent and thus an increase in Puerto Rico's

^{31/} The $-.9$ elasticity is the average arc elasticity of market demand for the period 1986-1988. The -1.47 elasticity is the average arc elasticity for market demand during the period 1986-1991. These figures differ from the elasticity statistic used in "The U.S. Stake in Competitive Global Telecommunications Services: The Economic Case for Tough Bargaining" a report produced by Strategic Policy Research and submitted by AT&T in Federal Communications Commission RM8355. The much lower elasticity in that report reflects the fact that the demand for telecommunications services was estimated for a global market. We will refer to this report as the "AT&T study".

^{32/} Premium Interstate Access Minutes by Study Area.

^{33/} This figure is derived from the value added per minute figure used in the AT&T study. In that study value added is 62 percent of the competitive price of a long distance minute. Our value added per minute figure is 62 percent of 20 cents per minute, or 12.4 cents.

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GDP of about \$13.5 million.^{34/} If we used the -1.47 price elasticity it would raise telecommunications value added by 31 percent and Puerto Rico's GDP by \$23 million.

This is the direct effect on the Puerto Rican economy but it is not the only effect. The 17 percent price reduction and the increase in long distance calls it stimulates also has an multiplier effect on GDP. The multiplier effect operates through the increased incomes that are associated with more economic activity. Macroeconomic models estimate the effect to be on the order of 1.4 times the direct impact on GDP.^{35/} Therefore the total effect of the 17 percent price drop on Puerto Rican GDP would range from an increase of approximately \$19 million to \$31 million.

To determine the effect on employment of an increase in Puerto Rican GDP that results from a fall in long distance prices we need a factor that will link growth in GDP to jobs. Macroeconomic studies of the U.S. economy have shown that there is a positive relationship between changes in GDP and changes in employment.^{36/}

^{34/} 19 per cent of \$73 million.

^{35/} The AT&T study also uses this 1.4 factor, p. 18.

^{36/} Models of the U.S. estimate that for every \$100,000 in GDP growth one new job is created. (AT&T study, p. 16) This relationship is likely representative of a capital intensive economy such as the U.S. These economies usually have higher incomes per worker and higher per capita incomes than labor intensive economies. As a general rule, the more capital the society has to work with, the more productive is its population. Puerto Rico, with much lower wage rates and per capita income, is a more labor intensive economy. It should not be surprising that the relationship between growth in GDP and growth in jobs is different in Puerto Rico than in the U.S.

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For Puerto Rico we estimate that for every \$23,577 of GDP increase one job was created. This, in fact, was Puerto Rico's experience between 1988 and 1993.^{37/} This implies that a 17 percent drop in telecommunications prices would produce between 801 and 1325 new jobs in the Puerto Rican economy. Therefore, vigorous telecommunications competition could create additional jobs in Puerto Rico. However, if competition in the off-island market is sufficiently threatened so that price reduction initiatives are less likely to be undertaken, the employment opportunities lost will be material.

V. THE COMPETITIVE EFFECTS OF FCC REGULATIONS ON ACCESS TO COST REDUCING INPUTS

FCC regulatory actions have a profound effect on competition in telecommunications. The most important example of the significance of regulatory policy for Puerto Rico telecommunications competition is the pending TLD application for an ownership interest in the new AMERICAS-1 and COLUMBUS II cable systems.^{38/} The FCC can either allow TLD to participate in the cable systems, which will permit TLD to expand its capacity, realize lower costs (through access to improved technology) and impose even stronger competitive discipline on AT&T, or it can

^{37/} Puerto Rico, U.S.A. Business and Economic Facts, December 1993, pp. 9-11.

^{38/} FCC File Nos. ITC-93-029, ITC-93-030, SCL-93-001, SCL-93-002.

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handicap TLD by denying it the right to participate, thereby tilting the playing field further in AT&T's direction.

The AMERICAS-1 and COLUMBUS II cable systems will create substantial cost reductions for TLD. TLD currently utilizes submarine cable systems for much of its domestic and international traffic, but the popularity of its services has pushed it up against the capacity constraints in the cable systems. As a result, TLD has had to rely on satellite and microwave capacity for the growing overflow of its traffic. Satellite and microwave transmission facilities are more costly, poorer quality and less reliable than cable systems.

For domestic traffic, access to additional submarine cable capacity will enable TLD to virtually eliminate the need to put calls through over high-cost satellite circuits. Currently, TLD puts 17 percent of its domestic traffic through satellites, and up to 30 percent during its peak hours.

Even the cable capacity that TLD currently utilizes is almost 400% more expensive than AMERICAS-1 and COLUMBUS II. Comparison of TLD's investment costs in these cable systems illustrates this point. TLD's \$17 million investment in the TCS-1 cable system came to over \$400,000 per voice channel, while TLD's \$8 million investment in AMERICAS-1 and COLUMBUS II comes to around \$111,000 per voice channel.

We have estimated the impact of these new cable systems on TLD's cost. The estimated cost reduction comes to one cent per

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minute (which equates to a 4.4 percent reduction) for domestic traffic. In a highly competitive market such as Puerto Rican off-island telecommunications, such cost reductions could be expected to be passed on to consumers. This estimated cost reduction ultimately should result in price reductions of approximately one cent per minute.^{39/}

Competitive pressure from TLD should be expected to force AT&T to lower its prices by a similar amount. Multiplying this one cent per minute price reduction times an estimated 586 million outgoing domestic minutes per year yields an estimated total customer savings for domestic traffic of approximately \$6 million per year.

The cable systems also would produce substantial savings on international routes, although these savings are harder to quantify. In addition, the increased international facilities capacity would entitle TLD to receive considerably more return traffic. The additional revenues from this return traffic would enable TLD to reduce its international rates further. In addition, the cable systems would enable TLD to provide direct cable service for the first time to Germany, Italy and Trinidad, resulting in substantial savings and increased competition on these routes. As **Table 6** shows, TLD's rates are already competitive with AT&T's on these routes, thus access to the new cable systems should enable TLD to become an even greater competitive force on those routes.

^{39/} Source: TLD internal cost studies.

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TABLE 6

**1994 DAYTIME TARIFFS FOR CALLS FROM PUERTO RICO
TO INTERNATIONAL DESTINATIONS
TLD WILL SERVE USING COLUMBUS II**

	<u>1st min.</u>	<u>add. min.</u>
Germany		
TLD	\$1.50	\$1.50
AT&T	\$1.70	\$1.50
Italy		
TLD	\$1.63	\$1.63
AT&T	\$1.85	\$1.65
Trinidad		
TLD	\$1.22	\$1.22
AT&T	\$1.35	\$1.23

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Economic theory clearly illustrates that a firm's ability to discipline its rival's prices is not due to its current market share, but rather it is due to its ability to make inroads into its rival's market share.^{40/} That is, the relevant competitive threat lies in the ability to affect a rival's future market share. For this reason, the expansion of low-cost capacity from TLD's participation in these cable systems will enable TLD to exert significant competitive pressure on AT&T.

Demand for long distance service originating in Puerto Rico continues to grow at a 10 percent annual rate.^{41/} If TLD cannot expand its low-price offerings to additional customers, this growth in market demand will provide increased opportunities for AT&T to raise prices further. AT&T's recent decisions to raise prices substantially in Puerto Rico in spite of price cutting by its rivals may be attributable to its recognition of the limited low-cost capacity of its major rival, TLD. Expanded low-cost capacity will enable TLD to aggressively compete with AT&T for additional market share.

Obviously, from the facts and analysis presented above, it would help AT&T measurably if TLD were prohibited from participating in AMERICAS-1 and COLUMBUS II cable systems.

^{40/} See, e.g., William Landes and Richard Posner, "Market Power in Antitrust Cases," Harvard Law Review, March 1981, p. 945.

^{41/} TLD, Inc., Plan Quinquenal 1994-1998, p. 62.

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Although TLD has recently begun offering a broad range of advanced telecommunications services, it cannot offer the highest quality and lowest prices for these services without being able to spread the considerable fixed costs over a larger customer base. Access to AMERICAS-1 and COLUMBUS II will enable TLD to significantly increase its customer base. TLD has invested over \$45 million in technology and infrastructure since it was established in 1989. This investment likely will not realize an adequate return to TLD nor to the economy of Puerto Rico if TLD does not have access to AMERICAS-1 and COLUMBUS II systems.

If TLD is not able to gain access to these new cable systems, its ability to act as a competitive restraint on AT&T will be diminished. This would mean that without a strong TLD competitive presence, AT&T's incentive to pass on any cost savings it realizes from the new cable systems to consumers would be considerably reduced. Keeping TLD from participating in AMERICAS-1 and COLUMBUS II would act primarily as a means of ensuring that AT&T would enjoy greater profits and that consumers would pay higher prices and realize little or none of the estimated \$6 million in annual benefits.

VI. REGULATORY LEVERAGING WILL NOT USHER IN A GOLDEN AGE OF INTERNATIONAL COMPETITION

Free trade and open markets are essential to the workings of the American economy and to its ability to compete in world

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markets. These truisms are even more important with industries that thrive on dynamic technological change and themselves serve as vehicles for the international distribution of goods and services. This certainly describes the telecommunications industry today, including long distance carriers. However, it is no secret that these carriers face barriers to entry in much of the world. That is, many economies protect their telecommunications industry from the competition that open markets would bring. But this protection is not just directed at foreign competition.

Most western economies that U.S. carriers find difficult to enter do not enjoy open telecommunications markets within their own borders. Basic voice and data transmission is controlled by state owned monopolies in most countries. However, internal closed markets are now feeling the pressure from the same kinds of competitive forces that contributed to the deregulation and competitive entry in the U.S. telecommunications industry. No foreign governments were successful in opening up U.S. telecommunications markets by threatening to deny American companies access to their respective markets.

Competition came to the U.S. telecommunications industry after it was clear that large private corporations could bypass the public switched networks by substituting private networks. The European Community, Open Network Directive of 1992 requires EC members to provide private line service interconnected to the

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public switched network.^{42/} The effect of this Directive is to allow bypass and competition with the public networks. This Trojan Horse will encourage private corporations to seek cheaper telecommunications services. As the markets are opened within borders there will be competitive pressures to open access between borders. Satellite transmission of international voice and data to private networks in Europe will place additional pressure on state telecommunications "monopolies" to lower their barriers and their prices.^{43/}

This strategy for international competition and for entry by U.S. carriers to foreign markets is likely to have a far greater chance for success than attempts to leverage the U.S. regulatory process into achieving foreign trade policy objectives. Telecommunications regulation, as we have seen, can be an important spur or impediment to competition when it is directed at the market it oversees. It has also been obvious that less telecommunications regulation has increased products and services, encouraged entry, lowered prices and increased employment. The Puerto Rican economy has been a beneficiary of this wise regulatory policy.

^{42/} U.S. Telecommunications Service in European Markets, Office of Technology Assessment, August 1993.

^{43/} Similarly, "callbacks" are a current competitive phenomenon that are creating just such competitive pressures where they previously had not been felt. See "Callbacks Cut Telephone Bills of Users Abroad," Wall Street Journal, June 21, 1994, B1. ("Analysts say that as callbacks become more common and sophisticated, foreign phone companies will have little choice but to lower international rates.")

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Those that oppose TLD expansion in the belief that use of the regulatory process as leverage will achieve an open market for them outside of the FCC's jurisdiction are likely bedazzled by the anticipated gains to be had. AT&T claims that reductions in foreign settlement rates worldwide promise great increases over ten years in U.S. GDP (about \$121 billion)^{44/} and in U.S. employment (120,000 jobs).^{45/} Of course, these estimates are highly speculative and require extended 10 year forecasts for revenues and costs. They also require that we accept the theoretical link between open markets, lower settlement rates and more international voice and data traffic. Even if all of these relationships are credible and the forecasts are accurate, the arm twisting mechanism of regulatory leveraging is an unlikely vehicle for their delivery. The exhortation by protectionists is to bargain hard and leverage hard and something will happen to "usher in a 'Golden Age" in international telecommunications."^{46/}

In the meantime the negative short term effects of regulatory leveraging will be born by those within the U.S. regulatory framework. In the case of TLD's applications to participation in the AMERICAS-1 and COLUMBUS II cable systems, the immediate beneficiary of a denial of these applications by the FCC would be, of course, TLD's main rival in Puerto Rico, AT&T. The immediate

^{44/} See AT&T Study, p. 12.

^{45/} Ibid., p. 19.

^{46/} Ibid., p. 2.